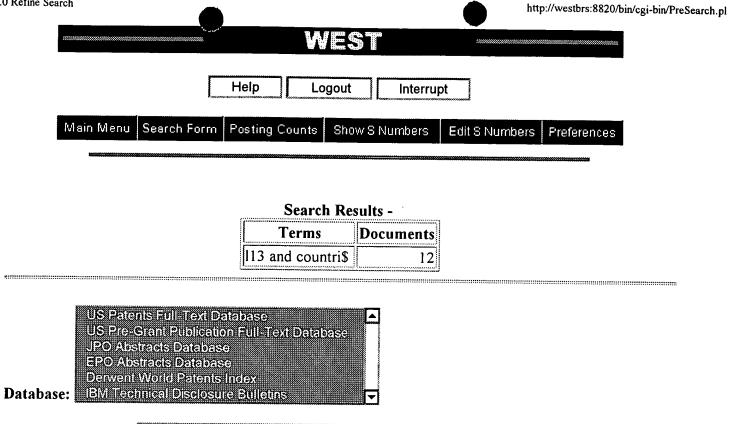
Clear



Search History

Today's Date: 11/26/2001

Refine Search:

DB Name	Query	Hit Count	<u>Set</u> Name
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	113 and countri\$	12	<u>L19</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	117 and symbol	1	<u>L18</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	115 and ticke\$	3	<u>L17</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	115 and ticke\$ same identifi\$	0	<u>L16</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	113 and ((705/\$)!.CCLS.)	16	<u>L15</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	<pre>111 and (normaliz\$ same symbol or identifi\$)</pre>	0	<u>L14</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	110 and (normaliz\$ same symbol or identifi\$)	95	<u>L13</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	110 and normaliz\$ same symbol or identifi\$	668457	<u>L12</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	110 and normaliz\$ same symbol	0	<u>L11</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	19 and fields	97	<u>L10</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	18 and character same string	99	<u>L9</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	17 and template	371	<u>L8</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	l6 and relational adj database	1323	<u>L7</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	global or world adj wide or universal with stock with symbol same identi\$	73631	<u>L6</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	global or world adj wide or universal with stock with symbol or identi\$	1305201	<u>L5</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	<pre>11 and ticke\$ near identifi\$</pre>	9	<u>L4</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	11 and (master same abbreviation or global same abbreviation)	28	<u>L3</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	11 and master same abbreviation	9	<u>L2</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	stock same symbols or global same symbols or global same name or alias same name	5107	<u>L1</u>

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Generate Collection

L31: Entry 30 of 32

File: USPT

Jun 8, 1982

DOCUMENT-IDENTIFIER: US 4334270 A TITLE: Securities valuation system

BSPR:

There are today approximately 9,000 different corporate securities which are actively traded on the New York <u>Stock Exchange</u>, the New York Bond Exchange, the American Stock and Bond Exchanges, the Midwest and Pacific Coast Regional Exchanges, and the N.A.S.D.A.Q. Over-the-Counter Market. There are at least that many additional securities of smaller corporations which are publicly held but less actively traded. A securities broker might well expect to find any of these securities in a customer's portfolio and will, in the regular course of business, have to periodically value these securities and the portfolio as a whole.

BSPR:

Of the 11,700 securities described above, there are about 30 changes of significance each day. These changes include stock splits, stock dividends, mergers, name changes, <u>ticker symbol</u> changes, new securities listings, transfers of securities from one <u>exchange</u> to another, or delistings.

BSPR:

In addition, each security is assigned a unique "ticker-symbol" comprising one to six characters, usually mnemonically related to the name of the security. This system of abbreviation is more commonly used than the other two by investors, registered representatives, traders, advisers, and "front-office" personnel because it is shorter and easier to remember.

BSPR:

Although both the Bunker-Ramo number and CUSIP number may be used internally, the "ticker symbol" is the customary external method of accessing securities pricing information in any quotation system, and in the printing quotation system making up the invention.

BSPR:

In producing a portfolio valuation schedule, the operator need only enter the <u>ticker symbol</u> for the Group 1 securities, the <u>ticker symbol</u> and the latest price for the Group 2 securities and the Group 3 supplemental securities in order to produce a valuation schedule of the portfolio.

BSPR:

The accuracy of the reports is obviously greatly enhanced by the fact that all calculations are made automatically by a digital computer. Similarly, all formatting, sorting, alphabetizing and typing is machine-controlled. Accuracy is further insured by an extensive system of cross-reference files, which automatically adjust the valuation schedule to reflect mergers, stock dividends, name changes, ticker symbol changes and the like which may have occurred since the publication of the latest VALPORT Securities Index (for which I claim a copyright), or since the previous portfolio valuation.

BSPR:

In addition, the `MOVE` option creates a cross-reference trail of any security moved in the files. The Master System Operator can also use this program to shift a security within the Group 1 securities files, within the Group 2 securities files, or to move a security from Group 1 to 2, or from Group 2 to 1. Moreover, the Master System Operator can `merge` securities, making an entry in the ticker symbol cross-reference file **SYMX1 and the security number cross-reference file **OLDNEW#1. He can also change a ticker symbol and/or security number, making the

appropriate cross-reference entries to the <u>ticker symbol</u> and security number cross-reference files, if necessary. An ordinary user can use the program in a more limited fashion to move securities within his supplemental securities file, or to cross-reference them to the Group 2 or Group 1 files.

BSPR:

There are 12 of these files. Six are active at any given time and six are mirror-image copy files. The files are controlled and the active protected names appear in **CONTPORT and are accessed as Y\$(1) through Y\$(6). The sequence of Records if alphabetical by ticker symbol (characters 1-7) in ascending alphabetical sequence.

BSPR:

This is a <u>symbol</u> cross-reference file, **SYMX1, which is updated to SYMX2 and copied back. The Records are in ascending alphabetical order by old <u>ticker</u> symbol.

BSPR:

Alphabetically sorted <u>ticker symbol</u> files for every letter of alphabet. The purpose is to allow lookup of new security number rather than manually enter number. It is accessed in the **PRICESEC and **VALSEC (MOVE) programs.

BSPR:

The sequence of records is alphabetical by $\underline{\text{ticker symbol}}$ (characters 1-7) in ascending sequence.

BSPC:

Y01--Y12--Master Ticker Symbol to Security Number Cross-reference File

BSPC:

**SYMX1--Ticker Symbol Cross-reference Files

BSPC:

X01-User Supplemental Security Ticker Symbol Files

BSPU:

Ticker Symbol File Selection Routine

BSPU:

Ticker Symbol Data Retrieval Routine

BSPII-

OLD/NEW Ticker Symbol Lookup Routine

BSTL:

New York Stock Exchange Approximately 2000
Securities New York Bond Exchange Approximately 2100 Securities American Stock
Exchange Approximately 1300 Securities American Bond Exchange Approximately 250
Securities NASDAQ (over-the-counter) Approximately 3200 Securities Pacific Coast
Stock Exchange Approximately 60 Securities Midwest Stock Exchange Approximately
50 Securities TOTAL Approximately 9,000 Securities

BSTL:
FILE DESCRIPTIONS Name Description
SYSTEM-WIDE FILES **VALPUSER User
validation codes **CONTPORT VALPORT master control M\$(1-50) Master security
**YO1-YO6 Ticker symbol to security number cross-reference **SYMX1-2 OLD to NEW
ticker symbol cross- reference **OLDNEW#1-#2 OLD to NEW security number
cross-reference **GFIFILE Master control of Bunker-Ramo source files **ANYSE01-04
Bunker-Ramo source files (accessed **BASE001-3 once daily to update VALPORT
files) **COTC001-3 **DNYBE01-04 **EPCSE01-02 **FMWSE01 CATFILE SUPFILE EXCPLIST
Daily exception list **SYM#A-Z USER FILES CATALOG1 User control variables;
representatives initials CONTROL1 Control file for user files METERA Monthly
usage report TEMPO Temporary portfolio storage X01,X02 User supplemental security
ticker symbol/security number cross-reference S01,02,03 User supplementary
securities 04,05 P01,02,03 User permanent portfolio storage 04,05 OLDNEW#1-#2 Old
to NEW security number cross- reference

BSTL:	
	Field No. Field Code Field Description
Hexadecimal lower case shift 5-34 M (3 security in each of securities masterf Monthly price date (YYMMDD) 37 NO Last 38 A\$ (1) ABCDEFGHIJKLM 39 A\$ (2) NOPQ +G+O A G 099 (control variable switch 42-53 D\$ (1-12) Names of all months 54 96-145 I\$, J\$ (1-25) Names of securiticities symbol file names 152-176 M\$ (1	-95 E\$ (1-32) Names of all 1/32 fractions es classification codes 146-151 Y\$ (1-6)
BSTL:	Field No. Field Code Field Description
	1 N1 Number of records in file RECORD
3,14 T\$ Security name (last 18 ch N3 Security number 6,17 C3 Cl.	s/maturity 9,20 V3 Daily price 10,21.
BSTL:	File Contains Symbols
(Croup 2) **V02 :022 :777 (Croup 2) **	**Y01 +AAA-+FZZ (Group 2) **Y02 +GAA-+NZZ 104 AAA FZZ **Y05 GAA NZZ **Y06 OAA ZZZ
(Group 2) ***103 +0AA-+222 (Group 2) ***	Field No. Field Code Field Description 1 N1 Number of items in file RECORD FIELDS
(N1) 2,3	. X\$ <u>Ticker</u> symbol/security number Example of a Typical Record ##STR1## ##STR2## ##STR3## Symbol Blank
Security number	##SIRI## ##SIRZ## ##SIRS## <u>Symbol</u> Blank
BSTL:	
	Field No. Field Code Field Description 1,2 Q\$ Old and new ticker symbols
(End-of-file is marked by Q\$ = "END**") Example of a typical Record	##STR4##
##STR5## ##STR6## Old ticker Blank New	
BSTL:	**ANYSE01-04 New York Stock Exchange
**BASE001-003 American Stock Exchange ** **DNYBE01-04 New York Bond Exchange ** **FMWSE01 Midwest Stock Exchange & American Stock Exchange **	**COTC001-003 Over-the-Counter (NASDAQ) EPCSE01-02 Pacific Coast <u>Stock Exchange</u>
10 G Close price 11 H Adjusted close price 14 K Bid price 15 L Offer price 1 indicator 18 O Quarterly earnings 19 P 21 R Dividend payment indicator 22 S St dividend 24 U Annual dividend 25 V Stoo	Cicker symbol (1-7) CUSIP (10-18) 5 B High price 8 E Low price 9 F Last price rice 12 I Yearly high price 13 J Yearly low
BSTL:	CATFILE1 A reference file in security
number sequence of next Securities Indealphabetical sequence. SECBOOK1 Printfication of the security of the security of the sequence. SUPPFIL1 Cumulative sequence. SUPPFILE SUPPFIL1 in alphabet	ex. CATFILE Same as CATFILE1 but in le which controls high speed printer. Number Sequence of current published

number 5,10 C3 Economic code CATF S\$,T\$,U\$,N3,C3 See CATFILE1 SUPPFIL1 (See CATFILE1 6,18 T3 Record type*	Field No. Field Code Field Description CATFILE1 (and CATFILE) 1,6 S\$ Name . U\$ Ticker symbol 4,9 N3 Security ILE2 1 D5 Date YYMMDD 2-6,7-11 and SUPPFILE) 1-5,13-17 S\$,T\$,U\$,N3,C3 7-11,19-24 V\$,W\$,X\$,W4,C4 Same fields pe* *Types: 1. Addition 2. Deletion 3. Old
EXCPLIST 1,6 S\$ Name (begin) 2,7. Symbol 4,9 N Security Number 5,10 deletion Ticker symbol if Ticker symbol	C\$ Blank for addition *** for
BSTL: Security number	Field No. Field Code Field Description 1,3 A\$ <u>Ticker symbol</u> 2,4 N
account name 4 R8 Representative number Previous valuation date (YYMMDD) 7 N2 Portfolio type 9 C2 Cash balance RECORT 10,16 P(,1) Security number 11,17 . P(,3) Amount (shares or \$ bonds) 13,5) Total customer cost 15,21 P(,6) Promame (1st 18 characters) +11,+20 T\$() U\$() Ticker symbol +13,+22 D () Divide	D FIELDS (N2)
N1) 2,3 Blank Security number	File Contains Symbols X01-02 =AAA - =ZZZ (Group 3) Field No. Field Code Field Description 1 N1 Number of items in file RECORD FIELDS X\$ Ticker symbol/security number Example of a Typical Record ##STR7## ##STR8## ##STR9## Ticker symbol
3,14 T\$ Security name (last 18 chat N3 Security number 6,17 C3 Cla	s/maturity 9,20 V3 Daily price 10,21.

DEPR:

The file CONTROL1 is then opened. In it is put an initial number (9,900,000) for the initial user supplemental security number, the names of each of the five portfolio files (P01 through P05), the names of the two user symbol ticker files (X01 and X02) and the names of the five user supplemental security files (S01 through S05). The file is then closed.

DEPR:

Each portfolio file (P01-P05), ticker symbol file (X01-X02), and supplemental security file (S01-S05) is opened and initialized by placing a numeric zero in the first field. Each file is then closed. Files CONTROL2 and TEMPO are opened as input files to test for their existence, and files OLDNEW#1 and OLDNEW#2 are opened as output files, initialized with numeric 0 in the first field, and closed. This procedure initializes all files and ensures that the user has made



no error in establishing them.

DEPR:

The **CONTPORT file is opened and the four hexadecimal characters are read into the first four positions of the X\$ array. The 30 security file control variables are then read into array M. The current date, monthly date, the highest supplemental security number, the alphabet, the numerals, the ticker symbol control file variable, the months of the year, the fractions, economic codes, and symbol and security file names are read and stored in the appropriate arrays and variables.

DEPR:

If the portfolio is to be entered from the keyboard, a sample line for formatting purposes is printed with or without a field for costs, depending on the answer to the previous question. The user then types in the number of shares, the ticker symbol, and, optionally, customer's cost for each issue.

DEPR:

This routine alphabetically sorts the portfolio <u>ticker symbols</u> created above. A numeric array I(S) is built up in which the values in order correspond with the row number of the security in array US(S) alphabetically sorted by symbol.

DEPR:

The routine involves two nested loops. In the first loop, each security is compared for the lowest alphabetic value. In each subsequent loop, each previously $\underline{identified}$ security is passed over during the comparison by filling a third array, X(S), successively with a constant value which indicates that the security should be bypassed in future comparisons. The value in I(1) therefore is the row number of lowest alphabetic value, and in I(2) is the next lowest alphabetic value, etc.

DEPR

The program then compares each <u>ticker symbol</u> in sequence to see if it is less than +G, +O, A, G, O, or 99 (A\$(4) of **CONTPORT) to determine the proper <u>ticker</u> symbol to security number cross reference file (**Y\$1-6).

DEPR:

For example, the <u>ticker symbol</u> comparison for IBM will set variable L equal to 5 since that <u>ticker symbol</u> will be in the fifth master <u>ticker symbol</u> to security number cross-reference file. Actually, that <u>ticker symbol</u> will be either in file Y05 or Y11 depending on which is the then currently active file. The variable Y\$(5) from the previously opened **CONTPORT file will identify the correct file so that the statement "OPEN 1, Y\$(L), INPUT" will open the correct file Y05 or Y11 to retrieve IBM.

DEPR:

The correct ticker symbol file is then opened. This file contains the SYMBOL/SECURITY NUMBER variables alpha-sorted by symbol, e.g.:

DEPR:

If the file contains over 20 records, the first 20 variables are read into F\$(1) . . . F\$(20). The 20th is compared with the desired ticker symbol. If the desired ticker symbol is greater, 20 more are read successively until the 20th is equal to or greater than the desired ticker symbol. (If the file contains 20 items or less, the program reads each one of the records individually.)

DEPR:

When 20 are to be searched, or when the last group of 20 or less is reached, each ticker symbol in the group is compared with the desired ticker symbol.

DEPR

When found, the variable A\$ contains the <u>ticker symbol</u> in the positions 1 through 7 and the security number in alpha form in positions 12 through 18. If no match is found, the **SYMX1 cross-reference file is searched for a new ticker symbol.

DEPR

If during the <u>ticker symbol</u> retrieval routine, the <u>symbol</u> being sought is not found, the program then branches to this routine. File **SYMX1 is opened. This file contains a string of records, each of which has the outdated <u>ticker symbol</u>

urrent ticker symbol. In either case, when a

and its corresponding newer or current <u>ticker symbol</u>. In either case, when a match is found, the program then branches back to the <u>ticker symbol</u> file selection routine and then the <u>ticker symbol</u> data retrieval routine. If, in this process, the new <u>ticker symbol</u> is not found, perhaps because it has again been modified, the program again goes back to this OLDNEW routine and looks for yet another current ticker symbol corresponding to the newer <u>ticker symbol</u>.

DEPR:

If the <u>ticker symbol</u> sought is not found anywhere, the terminal prompts the user to enter a corrected <u>ticker symbol</u> or to enter a zero instructing the system to bypass the incorrect <u>security</u>.

DEPR:

Once the correct symbol/number record is found, variable K\$ is set equal to the last seven characters of variable A\$ (the <u>ticker/number</u> pair) and variable A\$ is set to contain only the first seven characters; i.e., the symbol alone.

DEPR:

After the security number numeric sort, the program proceeds to this routine. Each security number in the array is compared with the security number in the M array and, when the security number in the M array is greater than or equal to the sought security number, the variable L <u>identifies</u> the master security file. The program then proceeds to look up the security data.

DEPR:

The <u>identified</u> portfolio file is opened and the number of portfolios in the file is read. The portfolio heading for each portfolio is read sequentially. If the portfolio shortname does not match the desired one, the system bypasses the unwanted portfolio array data and then retrieves the next portfolio heading. If the end of the portfolio is reached without finding a match, the terminal types that the portfolio shortname is not in the files and requests another file name.

DEPR:

Otherwise, the terminal prints each <u>ticker symbol</u> in sequence by security name and allows the operator to enter the total cost for each security. The program then changes the portfolio type, decreasing it by one, to indicate it contains cost information.

DEPR:

The operator is then asked if he wishes to record any sales. If so, he is prompted to enter the amount (shares or \$ bonds), <u>ticker symbol</u>, and (optionally), the cost of the securities sold. The portfolio data is adjusted accordingly.

DEPR

When all sales have been recorded, the operator is asked if he wishes to enter any purchases. If so, he is prompted to enter the amount, ticker symbol, and (optionally), the cost. For each such security, the system checks to see if the security is held in the portfolio. If so, the data is adjusted accordingly. If not, the system branches to the <u>Ticker Symbol</u> File Selection Routine and <u>Ticker Symbol</u> Data Retrieval Routine to find the security number; the Master Security File Selection Routine and Master File Data Retrieval Routine to retrieve the appropriate data for each such purchase.

DEPR

A standard mutual fund discount schedule is next read, and control branches to the alpha Tag Sort Routine by <u>ticker symbol</u>, the <u>Ticker Symbol</u> File Selection Routine, the <u>Ticker Symbol</u> Data Retrieval Routine, the <u>Alphabetic to Numeric Conversion Routine</u>, followed by a numeric tag sort routine based on security number.

DEPR:

Each of the records in the Bunker-Ramo files A\$(1)-A\$(17), should match a corresponding record in the VALPORT files, M\$(11)-M\$(25), for the records in both sets of files are sorted in security sequence. If the ticker symbols match, the program puts into the daily price field of the VALPORT record the price variable appearing in one of the following fields (in the preference stated) from the Bunker-Ramo files: namely, the last price, close price (yesterday's last price), bid price, or asked price, as well as any new dividend, earnings, stock dividend

date and stock dividend amount. (If the update is taking place on the day following the close of business of the first day of a new month, the old month-end price is discarded, and the previous day's closing price is transferred to the month-end price field before the new daily price is copied.)

On any given day, there will normally be about 9,000 matches and from 10 to 40exceptions. These exceptions will be: a new security added to the Bunker-Ramo data, a security deleted from the Bunker-Ramo data, a security moved in the Bunker-Ramo file, or a security with a new ticker symbol or name. The VALPORT files completely parallel the Bunker-Ramo files with one exception at present. Stocks on the Pacific Coast Stock Exchange (which has about 50 stocks exclusively listed there and about 1,000 stocks also listed on the New York or American Exchange) are included in VALPORT only if they are exclusively listed on PCSE. Moreover, since the Bunker-Ramo data contains only zeroes in the fields associated with bond interest rates and maturities, the correct data stored in VALPORT is not disturbed.

The program prompts the operator to enter a ticker symbol, checks that it contains 6 characters or less, and (for the master user) does not begin with "=".

DEPR:

When the ticker symbol supplied by the master operator is "+, , ," or the security supplied by the user is "=. . . ", representing Group 2 or Group 3 securities, the program automatically assigns a security number based on the latest Group 2 or Group 3 number.

DEPR:

Control then branches to the <u>Ticker Symbol</u> File Selection Routine, where the proper file, Y\$ (1-12) or Y\$ (7-8), is selected and opened for input together with its backup for output.

The first control field is increased by 1 to indicate the addition of a new security. Control then branches to the Ticker Symbol Data Retrieval Routine in which the contents of the old ticker symbol file are merged with the new ticker symbol and copied into the backup file.

DEPR:

Control then branches to the Master Security File Selection Routine and the Master Security Data Retrieval Routine in which the old file is merged together with the new security record and copied into the backup file. The File Name Flip-Flop Routine for both the security and ticker symbol files is then performed simultaneously so that the new record will be activated simultaneously in the ticker symbol file and master securities file. The master control file is then rewritten.

DEPR:

The meter is then adjusted to reflect the addition of a new security and ticker symbol. Control then returns to prompt the entry of another new ticker symbol. If the symbol is zero, the program ends.

This program is used to retrieve data about individual securities from the master security file when queried with the ticker symbol.

The user is prompted to enter a <u>ticker symbol</u>, and program control then branches to the <u>Ticker</u> File Selection Routine, the <u>Ticker Symbol</u> Data Retrieval Routine and, when the <u>ticker symbol</u> is found, the <u>Alpha to Numeric Conversion Routine</u> for the security number. The terminal then prints the ticker symbol and security number and goes through the Master Security File Selection Routine, the Master Security Data Retrieval Routine, and prints out the full name, economic code, dividend or interest, earnings or maturity, daily price and month-end price. The program then branches back and asks for another symbol. If it is zero, the program terminates.

DEPR:

The program begins with the Control File Variable Retrieval Routine. The operator is then prompted to supply a <u>ticker symbol</u>. It is checked to see if it begins with "=", indicating an error condition for the master operator.

DEPR

Control branches to the <u>Ticker</u> File Selection Routine and the <u>Ticker Symbol</u> Data Retrieval Routine.

DEPR:

In a routine similar to that of **(VALPORT(DEL) the <u>ticker symbol</u> file is copied over to its backup while blocking out the <u>ticker symbol</u> to be deleted.

DEPR:

In this process the initial numeric field is rewritten to reflect one less $\underline{\text{ticker}}$ symbol in the file.

DEPR:

After these procedures, a tandem File Name Flip-Flop Routine for the <u>ticker</u> <u>symbol</u> file names and the security file names is performed to allow simultaneous updating of the new files.

DEPR:

Control then branches to the <u>Ticker Symbol</u> File Selection Routine, the <u>Ticker Symbol</u> Data Retrieval Routine, the Alpha to Numeric Conversion Routine, the <u>Master Securities File Selection Routine</u> and the Master Securities Data Retrieval Routine to locate the desired security.

DEPR:

Following the edit the new record is copied to the backup file, together with all of the remaining records in the security file. Control then branches to the File Name Flip-Flop Routine, and the control file is rewritten. The program then branches back to determine if there is a new ticker symbol to be edited. If a zero is entered, the program terminates. **VALSEC(EDITPRI) - N72EPRI - EPRIOBJ

DEPR

This program is an abbreviated version of the VALSEC(EDIT) program using the same coding while bypassing certain sections. The user initially supplies a <u>ticker</u> symbol and price for the security whose price he wishes to change.

DEPR:

The program then goes through the Control File Variable Routine, determines whether the <u>ticker symbol</u> begins with "=", goes to the <u>Ticker Symbol</u> File Retrieval Routine, the <u>Ticker Symbol</u> Data Retrieval Routine, the Alpha to Numeric Conversion Routine, the <u>Master Security File Selection Routine</u>, and the Master Security Data Retrieval Routine, copying over the records to the backup file with the edited data for the selected security. Next, the file name Flip-Flop Routine is executed, and the control file rewritten. If a <u>ticker symbol</u> of zero is entered, the program terminates.

DEPR

This is a multi-purpose program that allows the VALPORT Master System Operator or any VALPORT user to move securities within the system to reflect changes of ticker symbols, mergers with other securities, movements from one exchange or another, or movements from Group 1, 2, or 3 to another Group.

DEPR

A security may effectively be "moved" by a combined use of the **VALSEC `DEL` and `NEW` programs. The change should preferably be done through the **VALSEC `MOVE` program to insure a proper trail and cross-reference. In this way, a portfolio referring to the outdated ticker symbol or security number can be valued based on the current security data.

DEPR

User Option 1. This program will change an existing user Group 3 security <u>ticker symbol</u> by deleting the old <u>ticker symbol from the ticker symbol</u> file, adding the new <u>ticker symbol</u> to the file, and noting the new <u>ticker symbol</u> in the proper field of that security record in the securities file. (The security number is not changed.)

DEPR

User Option 2. The program will merge a Group 3 security with an existing Group 3 security by deleting the old <u>ticker symbol</u>, deleting the old security record, and adding a record to the OLDNEW#1 file showing the two security numbers and the exchange rate.

DEPR

User Option 3. The program will merge a Group 3 security with either a Group 2 or Group 1 security by deleting the old $\underline{\text{ticker symbol}}$, deleting the old security record, and adding a record to the OLDNEW#1 file, cross-referencing the system to the security in the VALPORT master files.

DEPR:

Master Option 1. The program will change an existing Group 2 security to a new Group 2 security by deleting the old <u>ticker symbol</u>, re-entering the new <u>ticker symbol</u>, noting the new <u>ticker symbol</u> field in the master security record, and putting a new record in the SYMX1 <u>ticker-symbol-to-ticker-symbol</u> cross-reference.

DEPR:

Master Option 2. The program will merge an existing Group 2 security into another existing Group 2 security by deleting the old <u>ticker symbol</u>, deleting the old security record, and putting a cross-reference trail in the SYMX1 and OLDNEW#1 file for ticker symbol and security number cross-reference.

DEPR:

Master Option 3. The program will transfer an existing Group 2 security to a new Group 1 security by deleting the old <u>ticker symbol</u> and security record, going to the **SYM#A-Z files for the new Bunker-Ramo security number, entering the new <u>ticker symbol</u> and security record, and cross-referencing both in the SYMX1 and <u>OLDNEW#1</u> file.

DEPR

Master Option 4. The program will merge an existing Group 2 security into an existing Group 1 security by deleting the old ticker symbol, deleting the old security record, and cross-referencing both in the SYMX1 and OLDNEW#1 files.

DEPR:

Master Option 5. The program will change an existing Group 1 security to a new Group 1 security by deleting the old $\underline{\text{ticker symbol}}$ and security records, going to the **SYM#A-Z files for the new Bunker-Ramo security number, re-entering the new $\underline{\text{ticker symbol}}$ and security record and cross-referencing both with SYMX1 and $\underline{\text{OLDNEW#1}}$ as necessary.

DEPR:

Master Option 6. The program will merge an existing Group 1 security into an existing Group 1 security by deleting the old <u>ticker symbol</u> and security records, and cross-referencing both in SYMX1 and OLDNEW#1.

DEPR

Master Option 7. The program will merge an existing Group 1 security with an existing Group 2 security by deleting the old $\underline{\text{ticker symbol}}$ and security record and cross-referencing both in SYMX1 and OLDNEW#1.

DEPR:

Master Option 8. The program will change an existing Group 1 security to a new Group 2 security by deleting the old <u>ticker symbol</u> and security record, re-entering the new <u>ticker symbol</u> and security record, and cross-referencing both in SYMX1 and OLDNEW#1.

DEDR.

The number of security records can be checked against the number of <u>ticker symbol</u> records to ascertain whether they are equal. This feature is used to verify a breakdown during editing to determine it is necessary to examine the contents of the files.

DEPR

The CATSUPP option allows the user to print the contents of a cumulative

supplement to the Securities Index supplement. The user may begin at any page or can enter page 0 to selectively print additions, deletions or changes, beginning with a certain letter or the name of a given security. This allows a user to ascertain if there has been any change in the <u>ticker symbol</u> or otherwise with respect to a particular security.

DEPR:

This program allows a backup of the VALPORT master securities files for data protection. The program begins with the Control File Variable Retrieval Routine, opens SECFILE1 for output and copies the first 15 securities files, M\$(1)-M\$(15), and closes SECFILE1. It then opens SECFILE2 for output and puts the security records from files M\$(16) through M\$(25) in that file and closes it. Lastly, it opens SYMFILE and puts into it each of the VALPORT master ticker symbol files. In each case, the control heading for the file is not copied.

DEPR:

This program recovers the backed-up security files and <u>ticker symbol</u> files by opening SECFILE1, SECFILE2, and determining (from the CONTPORT file control array), the highest security to be put in each new file. It counts the records in SECFILE1 and SECFILE2 to determine the number of securities to be put in each VALPORT master securities file.

DEPR:

Following that procedure, the program opens the SYMFILE and determines the number of ticker symbols to go into each of the VALPORT master ticker symbol files. It then goes through the appropriate data retrieval routine and copies the records in to the proper files with the appropriate control heading number.

DEPR:

The program begins with the Control File Variable Retrieval Routine and then opens CATFILE and CATREF as output files. It places the current pricing date in CATREF. Each of the VALPORT master security files is then opened in sequence. The security name, ticker symbol, security number, and classification code are read into CATFILE while the security numbers alone are read into CATREF. After all of the securities have been read, all files are closed, and program control branches to the **SORTOBJ program.

DEPR

This program is used to check the correct formatting of a source data file. The user <u>identifies</u> whether it is a standard portfolio data file, with or without cost, or whether it is a standard or weekend estate file.

DEPC .

Ticker Symbol File Selection Routine

DEPC:

Ticker Symbol Data Retrieval Routine

DEPC

OLDNEW Ticker Symbol Lookup Routine

DETL:	:
-------	---

Name Type Size Content

M Numeric 30.times.1 Securities file

control variables F\$ Alpha 20 Ticker symbol lookup array J Numeric 100.times.6

Representative usage table X\$ Alpha 8 Control variables A\$ Alpha 5 Control

constants X Numeric 165 Tag sort secondary array I Numeric 165 Tag sort primary

array S\$ Alpha 165 Security name 1st 18 characters T\$ Alpha 165 Security name

last 18 characters U\$ Alpha 165 Ticker symbol N Numeric 165 Security number C

Numeric 165 Classification code D Numeric 165 Dividend rate E Numeric 165

Earnings Z Numeric 165 Stock Dividend variables Y Numeric 165 Stock dividend date

variables V Numeric 165 Current price W Numeric 165 Month-end price P Numeric

165.times. 6 Portfolio data array

DETL:

INDEX

TO PROGRAM LISTINGS Source Object Program Program User Name Name Program Function

DEMOPORT (DATAFILE) **DEMOPORT Typical portfolio with cost information BIGPORT (DATAFILE) **BIGPORT Large sample portfolio without cost information N72NEWP NEWPOBJ **VALPORT (NEW) Used to create a new portfolio; optionally store it in master portfolio files and link to report options N72EDITP EDITPOBJ **VALPORT (EDIT) Used to edit a portfolio (including additions, deletions and updating); optionally store it in master portfolio files and link to report options N72LISTP LISTOBJ **VALPORT (EDIT) Used by linking from EDITOBJ to list the edited portfolio N72DELP DELPOBJ **VALPORT (DEL) Used to delete a portfolio from the master portfolio files N72MOVEP MOVEPOBJ **VALPORT (MOVE) Used to move the portfolio and change the portfolio shortname N72READ READOBJ **VALPORT (LIST) Used to produce a portfolio listing N72VAL VALPOBJ **VALPORT (VAL) Used to type the detailed valuation schedule, (PUR) purchase recommendation schedule, or (SEL) sell recommendation schedule N72VALD VALDOBJ **VALPORT (VALD) Used to type the detailed valuation schedule without price/earnings ratio N72VALX VALPLOBJ **VALPORT (VALX) Used to type the extended valuation schedule showing gain and loss information N72SUM SUMPOBJ **VALPORT (SUM) Used to type the summary valuation schedule N72SUMPL SUMPLOBJ **VALPORT (SUMX) Used to type the extended summary valuation schedule N72TAX TAXPOBJ **VALPORT (TAX) Used to type the schedule of unrealized gains and losses (sorted by gain amount or gain percent) N72GAIN GAINOBJ **VALPORT (GAIN) Used to type the alphabetical schedule of gains and losses N72SIZE SIZEOBJ **VALPORT (SIZE) Used to type valuation schedule sorted by total value of holding ESTATE1 (DATAFILE) **ESTATE1 Sample portfolio for standard estate valuation ESTATE2 (DATAFILE) **ESTATE2 Sample portfolio for weekend estate valuation N72ESTP ESTPOBJ **VALPORT (EST) Used to type the standard estate valuation schedule N72ESTPW ESTPOBJW **VALPORT (EST) Used by linking from ESTPOBJ to type weekend estate valuation schedule N72XSP XSPOBJ **VALPORT (XS) First segment of user-customized access routine; retrieves portfolio and looks up securities information XSP (NONE) **XSP Second segment of user-customized access routine; links from XSPOBJ and used to weave and run (WVR) with user control programs to print user-customized reports XSDEMO (NONE) **XSDEMO Used to explain XS option to user N72COVP COVPOBJ **VALPORT (COV) Used to type the portfolio cover sheet N72HOLDS HOLDSOBJ **VALPORT (HOLDS) Used to list all portfolios holding a particular security N72SETUP SETUPOBJ **VALSETUP Used to gain access to the VALPORT system and initially install the system in a particular user "library". VALPORT (NONE) **VALPORT Master control program for VALPORT programs CHEKPORT (NONE) **CHEKPORT Determine location of errors in source data files USEPORT (NONE) **USEPORT Print detailed report of VALPORT system usage MGTPORT (NONE) **MGTPORT Print summary report of VALPORT usage, reset usage meter EDITCAT (NONE) **EDITCAT Add or edit representatives' initials, list representatives' initials and code numbers, edit forms control LISTCONT (NONE) LISTCONT Permits VALPORT master System Operator to access and print contents of VALPORT master control file EDITCONT (NONE) EDITCONT Permits VALPORT Master System Operator to edit contents of VALPORT master control file N72PRICE PRICEOBJ PRICESEC Used to automatically update VALPORT master securities files from raw Bunker-Ramo data and create exception file N72SUPGN SUPGNOBJ NONE Used by linking from PRICEOBJ to compare current master securities files with reference file created at time of publication of latest securities index; exceptions automatically create a cumulative sup- plement which is stored in SUPPFIL1 SUPPSORT* SORTSUPP NONE Used to sort contents of SUPPFILE1 into alphabetical sequence storing results in SUPPFILE N72NEWS NEWSOBJ **VALSEC (NEW) Used by any user to enter security into user sup- plemental files; used by VALPORT Master User to enter new security into VALPORT master securities files N72FINDS FINDSOBJ **VALSEC (FIND) Used to retrieve data about an individual security from a file when queried with ticker symbol N72CARDS CARDSOBJ **VALSEC (CARD) Used to produce a 3.times.5 card as a permanent record of securities stored in supplemental file N72DELS DELSOBJ **VALSEC (DEL) Used by any user to delete a security from his supplemental securities file or by VALPORT Master User to delete a security from VALPORT master securities files N72EDITS EDITSOBJ **VALSEC (EDIT) Used by any user to edit securities in user sup- plemental securities files and by VALPORT master user to edit securities in VALPORT master secu- rities files N72EPRI EPRIOBJ **VALSEC (EDITPRI) Used to update prices in user supplemental secu- rities files or VALPORT master securities file N72MOVE MOVEOBJ **VALSEC (MOVE) Move security records with automatic cross-indexing N72CATS CATSOBJ **VALSEC (CAT, Provides count of securities masterfiles or

CATSUPP, =SUPP) user supplemental security files; and prints cumulative supplement

to latest VALPORT Securities Index, and prints alphabetical list of users supplemental securities BACKSEC NONE BACKSEC Backup securities masterfiles and ticker_symbol masterfiles RECOSEC NONE RECOSEC Recover from BACKSEC N72SECD SECOBDS **SECDATES Print pricing dates for Bunker-Ramo and VALPORT files CATGEN

NONE CATGEN Strips security name, <u>ticker symbol</u>, security number and classification code from securities masterfiles and stores in CATFILE1 SORTSEC SORTOBJ NONE Alpha sort from CATFILE1 to CATFILE PRINTFCT NONE PRINTFCT Print contents of CATFILE or produce internal print file to produce VALPORT securities index CHEKSECS NONE CHEKSECS Print daily securities exception list from **EXCPLIST VALSEC NONE **VALSEC Master control program for VALSEC programs SUPPSEC NONE **SUPPSEC Print alphabetized listing of Group 3 supplemental securities

with SBC **CBSORT program to provide customized sort routine.

DETL:

__ Statement Description Q\$ Simple alphameric variable (up to 18 characters) A, B5, S0 Simple numeric variable Input Q\$ Terminal prints "?". User then types alphameric variable DIM R\$(100) Reserve space for an alphameric array of 100 (of 18 characters each) OPEN 1, Accesses previously identified "**VALPUSER", file **VALPUSER for reference as INPUT file 1. Only 4 files may be ac- cessed simultaneously. **NAME File or program with system-wide accessibility *NAME File or program with user-wide accessibility NAME File or program with library accessibility GET A\$ Get an alphameric data item from a previously opened file X\$(5) An alphameric array variable in array X\$, position 5. X1 = X1+1 Increase the value of X1 by 1 RESET 1 Reset pointer to first data item in a file Print ". . . " Print 3 unrepresentable characters in High Speed Printer, i.e. Tab, .ltoreq., .gtoreq., .noteq., index, backspace, exponent If \$0.100 If variable \$0 is .gtoreq., .ltoreq., or .noteq. (unrepresentable) 100 R\$(1)="" Set alphameric array variable to 18 blanks Put X\$(5) Place array variable in next field of opened output file DATA "PO1" Literal data for later use READ P\$(1) Assigns next data item, e.g., "P01" to the variable, e.g., "P\$(1)" MAT GET M Read numeric data into array IF STR(Z\$,1,1)="=" If the first character of String Z\$ is equal to =; i.e., is a user supplied supplemental security CPU Elapsed computer processing units (approximately 1/4 sec.) since program began CLK Time in seconds since midnite PRINT Skip down one line FNA(\tilde{X}) = Rounds X to nearest integer, i.e., INT $(X + 1/2) \times = 1.4$, 1.5 FNA(X) = 1,2 Pick L\$ Read alpha variable passed from linked program

CLPR:

3. The method of claim 2, including for each security a second key, herein called a <u>ticker symbol</u> and providing a cross-reference file between said <u>ticker symbols</u> and said security numbers, whereby said user may identify his portfolio securities by ticker symbol.

CLPV:

(j) providing a data file for storing sorted uniquely identified portfolios containing data about each security including fields having values corresponding to the security number and the amount of the security holding;

WEST

Generate Collection

L31: Entry 21 of 32

File: USPT

Mar 22, 1994

US-PAT-NO: 5297032

DOCUMENT-IDENTIFIER: US 5297032 A

TITLE: Securities trading workstation

DATE-ISSUED: March 22, 1994

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Trojan; Donald R. New Canaan CT
Keenan, III; Edward F. Franklin Square NY
Hyatt; Henry Glendale NY

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

Merrill Lynch, Pierce, Fenner & Smith New York NY 02 Incorporated

APPL-NO: 7/ 649761

DATE FILED: February 1, 1991

INT-CL: [5] G06F 15/30

US-CL-ISSUED: 364/408; 340/825.26 US-CL-CURRENT: 705/37; 340/825.26

FIELD-OF-SEARCH: 364/401, 364/406, 364/408, 340/825.26, 340/825.27

PRIOR-ART-DISCLOSED:

OTHER PUBLICATIONS

Weaver, "Critical Financial Market Systems", 1990, 4/1-4/3.
Landis, "Multi-Talented System Opens Windows for Trader's World", Wall Street Computer Review, Apr. 1988, pp. 86-89, 93.
"Apollo Weds Contessa", Computer World, Jun. 1, 1987, p. 41.
"Frankfurt Advances Technology: Bourse Automates", Communications Week International, May 13, 1991, p. 18.
"Aria to Offer Mac Trading System", PC Week, Mar. 8, 1988, p. 5.
Matthew, "OTC Success Spurs Specalized Trading Systems", Wall Street Computer Review, Sep. 1989, pp. 26-38.

ART-UNIT: 231

PRIMARY-EXAMINER: Envall, Jr.; Roy N. ASSISTANT-EXAMINER: Hazard; Jennifer L.

ATTY-AGENT-FIRM: Hopgood, Calimafde, Kalil, Blaustein, & Judlowe

ABSTRACT:

A work station for use by a trader of securities on an established market. The work station is integrated into a network of competing market makers for a plurality of securities for trading. A centralized database provides a feed of data on current market events for the securities, including price and transaction data. The work station is specifically programmed to receive the feed of data from the database and convert this datastream into a form conducive to enhanced trading. Seven separate applications permit the trader to track the market, select

trading. Seven separate applications permit the trader to track the market, select securities, bid and ask pricing, market direction and market depth. Traders equipped with the workstation are capable of entering transactions with more complete and copious knowledge about the extant market.

8 Claims, 10 Drawing figures

Generate Collection

L31: Entry 21 of 32

File: USPT

Mar 22, 1994

DOCUMENT-IDENTIFIER: US 5297032 A TITLE: Securities trading workstation

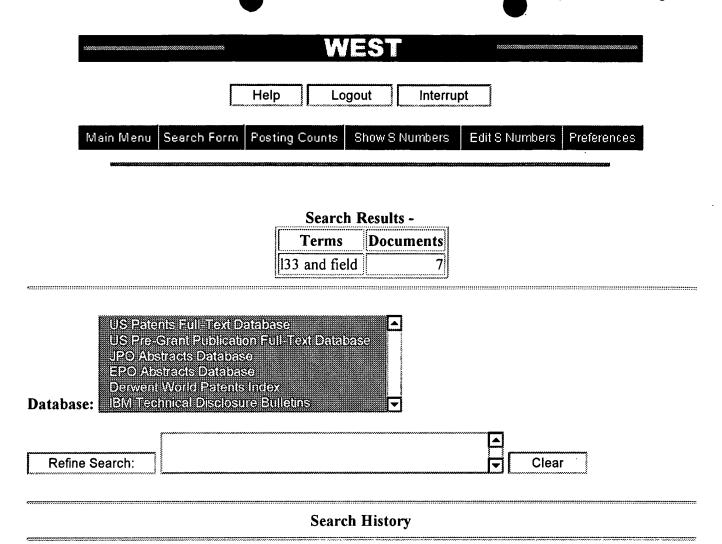
BSPR:

The trading of financial instruments such as stocks and bonds has largely become a computer supported operation. Almost all significant trading of securities is accomplished by computer pursuant to the established protocols of the major exchanges. For example, on the New York <u>Stock Exchange</u>, orders for specific securities are entered at a terminal operated by a licensed agent with a "seat" on the exchange. This order is processed through a stock "specialist", a firm that is obligated to manage transactions for a given security. The specialist clears the trade at a price reflecting the current supply-demand environment for that security. Upon confirmation of the trade, the parties up-date their respective positions via computer controlled memory. For the most part, the above transaction is accomplished through computer terminals linked together by communication busses or telephone lines.

DEPR:

At the workstation, the on-line data is presented through the seven windowed interfaces in a manner as depicted in Table 1 below. The Table 1 representation corresponds directly to the windows presented in FIG. 2 of the workstation, except now detailed information regarding actual trades, market makers, volume bid and ask prices, etc. are presented. In overview, the top two windows in Table 1 are the TICKER applications. The first TICKER application presents current bid and ask prices for select securities. For example, the first entry in Table 1. INTC, represents Intel Corporation with a current bid price of 391/2, a current ask price of 401/2 and the market maker providing these price quotes is represented by the symbol SMDV.

Implementation of the various applications provided above is accomplished in a software language compatible to the particular hardware environment chosen. As identified above, the present invention envisions an open architecture operating system, such as UNIX, and, therefore, controlling algorithms must be programmed in a UNIX compatible language, such as "C". In addition, the use of windows to provide the interface between the trader and the application requires certain additional software packages, such as the X11 Window system. Application of these software environments has become, per se, well known to those skilled in this art. The following description of the logic flow path for the workstation applications are presented in flow chart form. The counter T is used to reference past, current and future events as sequentially tracked by the system. For example, NASD(T) is the data feed from the Host for the "T" time period.



Today's Date: 11/26/2001

DB Name	Query	Hit Count	<u>Set</u> Name
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	133 and field	7	<u>L34</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	131 and (relational same database or relational same data same base)	7	<u>L33</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	l31 and relational same database or relational same data same base	1788	<u>L32</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	130 and identifie\$	32	<u>L31</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	128 and ticke\$ same symbol	39	<u>L30</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	l22 and global near stock near exchange	0	<u>L29</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	l22 and internationalnear stock near exchange	597	<u>L28</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	122 and foreign near stock near exchange	0	<u>L27</u>

USPT,PGPB,JPAB,EPAB,DWPI,TDBD	l22 and (foreign near stock or foreign near security)	0	<u>L26</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	124 and symbol	4	<u>L25</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	l23 and normaliz\$	4	<u>L24</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	122 and identifie\$	12	<u>L23</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	121 and ticke\$ same symbol	13	<u>L22</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	11 and ((705/\$)!.CCLS.)	565	<u>L21</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	119 and ticke\$ same identifie\$	1	<u>L20</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	118 and normaliz\$	136	<u>L19</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	11 and (symbol or symbols)	903	<u>L18</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	116 and ticke\$	3	<u>L17</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	11 and normaliz\$ same symbol	18	<u>L16</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	11 and normaliz\$ near symbol	1	<u>L15</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	112 and (symbol or symbols)	4	<u>L14</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	112 and symbol or symbols	204641	<u>L13</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	11 and global near security	4	<u>L12</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	11 and global near ticke\$ near securit\$	0	<u>L11</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	11 and global near ticke\$ near symbol	0	<u>L10</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	11 and global near symbol	2	<u>L9</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	l6 and global near symbol	0	<u>L8</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	l6 and global near sysmbol	0	<u>L7</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	<pre>11 and ticke\$ near identifie\$</pre>	5	<u>L6</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	12 and global near symbol	2	<u>L5</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	13 and symbol	6	<u>L4</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	12 and global near identifie\$	21	<u>L3</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	"relational database" or "relational data base"	5459	<u>L2</u>
USPT,PGPB,JPAB,EPAB,DWPI,TDBD	relational with database or relational with data adj base	5988	<u>L1</u>

Generate Collection

L31: Entry 30 of 32

File: USPT

Jun 8, 1982

US-PAT-NO: 4334270

DOCUMENT-IDENTIFIER: US 4334270 A

TITLE: Securities valuation system

DATE-ISSUED: June 8, 1982

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

Towers; Frederic C.

Bethesda

MD

20034

APPL-NO: 5/ 279781

DATE FILED: August 11, 1972

INT-CL: [3] G06F 15/21 US-CL-ISSUED: 364/300

US-CL-CURRENT: 705/36

FIELD-OF-SEARCH: 235/451.1, 340/172.5, 444/1, 364/300

PRIOR-ART-DISCLOSED:

OTHER PUBLICATIONS

File Organization and Data Mangement; Annual Review of Information Science and Technology, vol. 2, 1967, pp. 123-160, Jack Minker and Jerome Sable.

ART-UNIT: 236

PRIMARY-EXAMINER: Wise; Edward J. ATTY-AGENT-FIRM: Roberts and Stout

ABSTRACT:

This discloses a method of operating a general purpose digital computer to produce securities portfolio valuation schedules for multiple simultaneous users. The computer maintains securities information in system-wide files which are updated, both electronically and manually, on a daily basis. The system permits each user to store information about his portfolios, as well as information about supplemental securities not contained in the system-wide files.

5 Claims, 0 Drawing figures



End of Result Set

Generate Collection

L20: Entry 1 of 1

File: USPT

May 22, 2001

US-PAT-NO: 6236980

DOCUMENT-IDENTIFIER: US 6236980 B1

TITLE: Magazine, online, and broadcast summary recommendation reporting system to

aid in decision making

DATE-ISSUED: May 22, 2001

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Reese; John P

West Hartford

CT

06117

APPL-NO: 9/ 057823

DATE FILED: April 9, 1998

INT-CL: [7] G06F 17/60

US-CL-ISSUED: 705/36; 705/26, 705/10 US-CL-CURRENT: 705/36; 705/10, 705/26 FIELD-OF-SEARCH: 705/36, 705/26, 705/27, 705/10

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

	Search Select	ed Search ALL	
PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4870579	September 1989	Неу	364/419
4989141	January 1991	Lyons et al.	364/408
4996642	February 1991	Неу	364/419
5006998	April 1991	Yasunobu et al.	364/513
5132899	July 1992	Fox	364/408
5262941	November 1993	Saladin et al.	364/408
5383111	January 1995	Homma et al.	364/401
5414838	May 1995	Kolton et al.	395/600
5502637	March 1996	Beaulieu et al.	364/408
5583763	December 1996	Atcheson et al.	364/55101
5812988	September 1998	Sandretto	705/36
5819271	October 1998	Mahoney et al.	707/9
5893079	April 1999	Cwenar	705/36
5897639	April 1999	Greef et al.	707/103



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Harris, Diane, "Smart Ways to Shop the New Financial Supermarkets," Money, vol. 26, No. 6, pp. 100-109, Jun. 1997.* Gianturco, Michael, "Investing on the Web: Surf and Grow Rich!," Forbes, pp. 36-38, Jun. 3, 1996.

ART-UNIT: 275
PRIMARY-EXAMINER: Stamber; Eric W.
ASSISTANT-EXAMINER: Meinecke-Diaz; Susanna
ABSTRACT:

The invention utilizes a computer apparatus to automatically generate displays or reports containing investment security or element recommendations (FIG. 4, box 133) along with an optional summarization of the reasons (FIG. 4, box 134) for the recommendation from magazines, online sources, and broadcast programs for one specific security or element (FIG. 4, box 132) at a time or one specific recommendation source (FIG. 7, box 184) at a time. The aforementioned reports could additionally include the performance of the recommendors (FIG. 5, box 156). A report could also be provided to show the performance statistics (FIG. 8b, box 196, box 204, box 206, box 208, box 210, box 212, box 214) of a recommendation source (FIG. 8b, box 194) for predetermined date ranges (FIG. 8b, box 216) either in an aggregated and averaged format (FIG. 8b) or for each recommendation (FIG. 8c) made by the recommendation source. Additionally, a report could be provided to show the performance of elements or securities that were mentioned (FIG. 51), not just recommended, in magazines, online sources, and broadcast programs.

26 Claims, 57 Drawing figures

WEST

End of Result Set

Generate Collection

L25: Entry 4 of 4

File: USPT

Jun 15, 1993

US-PAT-NO: 5220500

DOCUMENT-IDENTIFIER: US 5220500 A

TITLE: Financial management system

DATE-ISSUED: June 15, 1993

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Baird; Andrew V. Malden MA
Boyer; William E. Boston MA
Pithavadian; Shakunthala S. Cambridge MA

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

Batterymarch Investment System Boston MA 02

APPL-NO: 7/ 409650

DATE FILED: September 19, 1989

INT-CL: [5] G06F 15/20, G06F 15/38

US-CL-ISSUED: 364/408; 364/419

US-CL-CURRENT: 705/36

FIELD-OF-SEARCH: 364/408, 364/406, 364/401, 364/419

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

		Search Selected	I Search ALL	
	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
	4903201	February 1990	Wagner	364/408
m	4989141	January 1991	Lyons et al.	364/408

OTHER PUBLICATIONS

Hypercard User's Guide, Apple Computer, Inc., 1988, pp. 15-17. Aho et al. (Chapters 4 and 5 of Compilers: Principles, Techniques, and Tools, Addison-Wesley, Reading, Mass. 1986).

ART-UNIT: 231

PRIMARY-EXAMINER: Envall, Jr.; Roy N. ASSISTANT-EXAMINER: Poinvil; Frantzy ATTY-AGENT-FIRM: Fish & Richardson

ABSTRACT:

A method for enabling a user to interactively create and modify a model of an investment strategy to be applied to data pertaining to a set of possible investment entities. A graphical representation of a sequence of statements which

entities.

investment entities. A graphical representation of a sequence of statements which describe data manipulations corresponding to the investment strategy is provided; the result of the sequence of statements, when applied to the data, is a selection of a subset of entities from the set of possible entities. The user is enabled to interactively enter and manipulate the statements and the sequence of statements

via the graphical interface to alter the investment strategy. The user may "run" the strategy via the graphical interface, using the data to derive the subset of

16 Claims, 46 Drawing figures

11/26/01 6:06 AM

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L25: Entry 3 of 4

File: USPT

Jul 13, 1993

US-PAT-NO: 5227967

DOCUMENT-IDENTIFIER: US 5227967 A

TITLE: Security instrument data system without property inapplicable nulls

DATE-ISSUED: July 13, 1993

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Bailey; Stephen C. Agoura CA 91301

APPL-NO: 7/ 326224

DATE FILED: March 20, 1989

INT-CL: [5] G06F 15/21 US-CL-ISSUED: 364/408 US-CL-CURRENT: 705/35

FIELD-OF-SEARCH: 364/401, 364/406, 364/408

PRIOR-ART-DISCLOSED:

OTHER PUBLICATIONS

Database Design Methodology, M. Vetter, 1981, pp. 86-89.
"Stock Market Portfolio Management System", James Ray, PC Magazine, vol. 6, No. 8, pp. 140-141, Feb. 1989, Microsearch AN 89-052844.
"Portfolio Decisions", Product Literature by Silver Eagle Software, Nov. 1987, Microsearch file of Orbit, AN 87-045391.

ART-UNIT: 231

PRIMARY-EXAMINER: Hayes; Gail O. ATTY-AGENT-FIRM: Blum; Alvin S.

ABSTRACT:

This system and method for storage and retrieval of investment asset data in a computer system separates the data into many small files each of limited size and related to a functional attribute of the investment instrument. By storing the data in these separate files rather than all together as in the prior art, one develops a system that appears more complex, but is better suited to computer processing. It is faster, more easily programmed, less prone to error, and more readily expanded to handle diverse investment vehicles with different attributes such a unique interest formulations, discount bonds and the like without impact on previously recorded issues.

7 Claims, 13 Drawing figures

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L34: Entry 4 of 7

File: USPT

Feb 6, 2001

US-PAT-NO: 6185567

DOCUMENT-IDENTIFIER: US 6185567 B1

TITLE: Authenticated access to internet based research and data services

DATE-ISSUED: February 6, 2001

INVENTOR-INFORMATION:

CITY STATE ZIP CODE COUNTRY NAME Ratnaraj; Paul J. Sicklerville ŊJ McCartney; William Gerard Philadelphia PA Philadelphia PA To; Son Philadelphia PΑ Crispi; Steven J. New York NY Akhavein; Jalal D.

ASSIGNEE-INFORMATION:

STATE ZIP CODE COUNTRY TYPE CODE CITY NAME

The Trustees of the University of Philadelphia PA 02

Pennsylvania

APPL-NO: 9/ 087184

DATE FILED: May 29, 1998

INT-CL: [7] G06F 17/30

US-CL-ISSUED: 707/10; 705/26, 707/5, 707/8, 707/100, 709/203 US-CL-CURRENT: 707/10; 705/26, 707/100, 707/5, 707/8, 709/203 FIELD-OF-SEARCH: 707/2-6, 707/10, 707/8, 707/100, 707/103, 707/202, 705/26,

705/27, 709/203

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
5398336	March 1995	Tantry et al.	707/103
5708780	January 1998	Levergood et al.	395/200.12
5778367	July 1998	Wesinger, Jr. et al.	707/10
5819255	October 1998	Celis et al.	707/2
<u>5826014</u>	October 1998	Coley et al.	395/187.01
5826265	October 1998	Van Huben et al.	707/8
5859972	January 1999	Subramaniam et al.	709/203
5920873	July 1999	Van Huben et al.	707/202
5937406	August 1999	Balabine et al.	707/100
5963915	October 1999	Kirsch	705/26
6094654	July 2000	Van Huben et al.	707/8

ART-UNIT: 271

PRIMARY-EXAMINER: Alam; Hosain T. ASSISTANT-EXAMINER: Alam; Shahid

ATTY-AGENT-FIRM: Woodcock Washburn Kurtz Mackiewcz & Norris LLP

ABSTRACT:

Access to a database is provided via the Internet using a World Wide Web server including a search engine, a CGI gateway and user selectable data queries for extracting data, generating reports, and the like. Access by the user is authenticated by querying the user's central machine for authentication. The authentication process operates by sending a page request from the web browser through three checkpoints before the requested page can be served to the web browser. The first checkpoint determines if the requested page is protected. If not, the requested page is served to the web browser. However, if the requested page is protected, the authentication process on the web server checks the host name of the system where the page request is coming from. If the domain of the requesting host is the same domain specified in the web authentication configuration, then the requested page is served to the web browser. However, if the page request is determined to come from outside of the domain of the web server, then the authentication process checks a "cookie" from the web browser to determine if the requesting user has been authenticated as an authorized user earlier in the same session. If the cookie has been "set" during the login procedure, then the requested page is served to the web browser. Otherwise, the user is prompted with a login page. After the user ends the web browser session, the cookie is cleared. Data Query software at the web server permits queries initiated via a web browser to be completed off-line and the results e-mailed to the initiator of the request.

5 Claims, 4 Drawing figures